



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,468	07/24/2003	R. William Arling	1062/C86	1285
2101	7590	11/10/2004	EXAMINER	
BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			SHRIVER II, JAMES A	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/626,468	ARLING ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	J. Allen Shriner	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 24 July 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 10 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/26/2003</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on September 26, 2003 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurschat (US Patent 5,604,209) in view of Malick (US Patent 3,399,742).** Kurschat discloses a method for towing a carrier with a transporter (See Fig. 1), the method comprising coupling the carrier to the transporter with a pivot, the pivot characterized by a pivot axis; propelling the transporter by actuation of a ground-contacting element; wherein the transporter includes a platform and at least one ground-contacting element, each ground contacting element rotatably attached to the platform about a rotation axis and wherein the pivot axis is coincident with the rotation axis; wherein coupling the carrier includes attaching the carrier such that the carrier rides behind the transporter; wherein the transporter includes at least two laterally disposed ground contacting elements and coupling the carrier includes attaching the carrier such that at least one pivot is disposed between the two ground contacting elements. Kurschat does not disclose

sensing a tilt of the transporter and maintaining the transporter in a dynamically stable position based on at least in part on the tilt of the transporter. Malick discloses a transporter that maintains a dynamically stable position by applying a torque to the ground-contacting element based at least in part of the tilt of the transporter. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the transporter disclosed in Malick for the transporter disclosed in Kurschat. The motivation for doing so would have been to provide a vehicle with rapid acceleration and braking and high maneuverability to provide a sporting ride (See column 1, lines 63-66).

Regarding Claim 1, the combination of Kurschat and Malick would inherently disclose a method for governing motion of a combination of a dynamically balanced transporter and a carrier, the method comprising coupling the carrier to the dynamically balanced transporter with a pivot (Kurschat, See Fig. 1); tilting the transporter in a direction of desired motion; and governing motion of the combination of transporter and carrier in response to the tilt of the transporter.

Regarding Claim 2, Kurschat discloses wherein the carrier is a second transporter (the trailer in Kurschat is used to transport a person).

Regarding claim 7, Kurschat does not disclose wherein the coupling of the carrier includes attaching the carrier such that the carrier rides in front of the transporter. The rearrangement of the pivot to allow the carrier to placed in front the transporter as opposed to be trailing the transporter would merely by an obvious matter of design choice because shifting of the position of the carrier would not materially alter the operation of the transporter, See *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

5. **Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurschat (US Patent 5,604,209) and Malick (US Patent 3,399,742 as applied to claim 1 above, and further in view of Simpson (US Patent 3,724,874).** Kurschat and Malick disclose a method of governing motion of a combination of a transporter and trailer as set forth above in paragraph 3, but does disclose coupling an additional carrier to the carrier. Simpson discloses coupling additional carriers onto carriers. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to couple additional carriers to previous carriers in the combination of Kurschat and Malick in view of the teaching of Simpson. The motivation for doing so would have been to provide more carriers so that more items or passengers could be transported.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Allen Shriver whose telephone number is (703) 308-1224. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris P. Ellis can be reached on (703) 305-0168. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1113.

As of May 1, 2003, any response to this action should be mailed to:

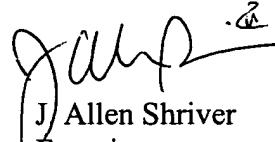
Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Art Unit: 3618

Or faxed to: (703) 305-3597 or (703) 305-7687 (for formal communications intended for entry. (703) 746-3852 (for informal communications directly to the Examiner).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuesday, November 09, 2004

  
J. Allen Shriver  
Examiner  
Art Unit 3618

11/9/04

JAS